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| EXAMINER | |
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| WOLLSCHLAGER, JEFFREY MICHAEL | |
| ART UNIT | PAPER NUMBER |
| 1791 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/796,702 | PETERSEN ET AL. | |
| | Examiner | Art Unit | |
| | JEFFREY WOLLSCHLAGER | 1791 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *16 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-3,7,11,16,17,19-23,25-27 and 34-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 7, 11, 16, 17, 19-23, 25-27, and 34-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

Applicant's amendment to the claims filed November 16, 2009 has been entered. Claims 1-3, 25-27, 42 and 43 are currently amended. Claims 44-51 are new. Claims 4-6, 8-10, 12-15, 18, 24, and 28-33 have been canceled. Claims 1-3, 7, 11, 16, 17, 19-23, 25-27, and 34-51 are pending and under examination.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and any one of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899).

Regarding claims 1, 7, 39 and 42, Buzzell et al. teach a process of producing stretched fasteners comprising providing a fibrous web layer (Figure 13 and Figure 13a) for employment as the loop member in a hook and loop fastener (col. 14, line 60 - col. 15, line 27); passing the fibrous web layer through the nip formed by two rolls, one of them (14) having cavities that are negatives of a plurality of male fastening elements (Figure 13 and Figure 13a); introducing a molten thermoplastic (col. 2, lines 40-55) resin (20) into the cavities in excess of amount that would fill the cavities which excess forms the web layer (Figure 13a); allowing the resin to at least partially solidify and stripping of the laminate from the roll (Figure 13); stretching the precursor web laminate (Figures 1 and 2; Abstract) either monoaxially or biaxially (col. 11, line 4-col. 12, line 8) to produce a fastener for the intended application (col. 10, lines 50-67). Additionally, Buzzell et al. incorporate Kennedy et al. into their disclosure by reference at col. 15, line 5. Kennedy et al. teach a method of producing laminated hook fastener products wherein they teach that woven or knitted materials (Figure 8; col. 6, lines 38-41) or non-woven materials (Figure 5; col. 5, lines 50-64) may be employed, as desired, to create a laminated article that is capable of engaging into hooks or that can receive other bonding agents (col. 3, lines 5-14). Further, Kennedy et al. suggest optimizing the weight and thickness of the nonwoven layer (col. 5, lines 50-64). Buzzell et al. do suggest the fibrous material employed to form the laminate (Figure 13a) functions as loops in a hook and loop fastener (col. 15, lines 23-27), but do not teach that employment of a nonwoven fibrous material that is in continuous contact with the thermoplastic web layer (i.e. a nonwoven fibrous material that is not pre-compressed) which is free of staple fibers is employed.

However, Jackson teaches a method of producing a loop fastening material which comprises an orientable backing substrate which can be made of a substantially consolidated nonwoven material (col. 5, lines 29-35; claim 3) upon which filaments are applied for forming the

loops (Abstract; Figure 1; col. 3, line 32-col. 4, line 26). Jackson does not expressly recite the structure of the "substantially consolidated nonwoven material". However, each of Martin (Abstract; col. 2, lines 1-27; col. 3, line 22-col. 4, line 66; col. 6, lines 16-56), Semjonow (Abstract; col. 1, lines 5-15; Figure 5) and Steuber (Figure 1; col. 1, lines 10-20; col. 2, lines 25-42; col. 3, lines 7-47) teach methods of producing analogous and applicable consolidated nonwoven materials that are free of staple fibers.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have employed the loop fastening material disclosed by Jackson as the loop material in Buzzell et al. for the purpose of employing a relatively inexpensive loop material that could be stretched. Further, as suggested by each of Martin, Semjonow, and Steuber, one having ordinary skill would have found it obvious to have employed a nonwoven material that was free of staple fibers in the combination (i.e. as the orientable backing substrate of Jackson) since, the examiner submits, such a structure is implied by the disclosure of Jackson and each of Martin, Semjonow, and Steuber disclose advantages associated with employment of their material that would be applicable to achieving the goals set forth by each of Buzzell et al. and Jackson (e.g. Martin: improved elasticity; Steuber: col. 3, lines 35-37).

The examiner recognizes that Buzzell et al. do not expressly recite all the claimed physical properties and effects. However, the combination employs the same claimed materials and performs the same claimed steps in the same claimed manner. As such, the examiner submits that the same claimed effects and physical properties are intrinsically achieved by the practice of the combined method (e.g. decreasing basis weight to a weight of less than 100 $g/m^2$). For example, Buzzell et al. teach the thickness of the web is reduced to a thickness as

low as about 0.001 inches (col. 13, lines 26-36) (i.e. about 25 um) which is within the range set forth by the instant disclosure (US 2005/0202205; paragraphs [0062] and [0082]).

As to claim 11, Buzzell et al. teach polyethylene, polyesters, and nylon are suitable thermoplastic resins (col. 2, lines 40-55).

As to claims 16 and 17, Buzzell et al. teach biaxially stretching the material to the extent required (col. 11, line 12 -col. 12, line 8; Figure 1 and 2; Figure 12) including stretch ratios ranging from 2-8 (col. 8, lines 4-41).

As to claim 19, Buzzell et al. employ a tenter apparatus (Figure 1 and Figure 2).

As to claims 20, 21, and 34, the secondary references suggest fibrous layers having a basis weight in the claimed range (see citations above). Further, Buzzell et al. teach stretch ratios ranging from 2-8 (col. 8, lines 4-41).

As to claims 22 and 23, Buzzell et al. suggest a web having a thickness of about 0.001 inches (about 25 um) and teach stretch ratios ranging from 2-8 (col. 8, lines 4-41; col. 11, line 12-col. 12, line 8).

As to claim 25, Buzzell et al. teach fastener elements having densities in the range of 200-2000 per sq. inch and further teach optimizing the density depending upon the desired final use of the fastener (col. 8, lines 40-65).

As to claim 26, the combination employs the same claimed materials to practice the same claimed method in the same claimed manner. Accordingly, the same claimed physical properties and effects (e.g. tensile strength in the machine direction) would intrinsically be realized by the practice of the combined method.

As to claim 35, Buzzell et al. teach monoaxially and biaxially stretching the material to the extent required in the machine and width direction (col. 11, line 12 -col. 12, line 8; Figure 1 and 2; Figure 12) including stretch ratios ranging from 2-8 (col. 8, lines 4-41).

As to claims 37 and 38, the combination performs the same claimed steps in the same claimed manner on the same claimed materials. As such, the examiner submits that implicitly, the same claimed effects and physical properties would be achieved by the practice of the combined method.

Claims 2, 40, 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of de Navas Albareda (US 4,056,593) and Jackson (US 5,699,593) and any one of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899).

Regarding claims 2, 41 and 43, Buzzell et al. teach a process of producing stretched fasteners comprising providing a fibrous web layer (Figure 13 and Figure 13a) for employment as the loop member in a hook and loop fastener (col. 14, line 60 - col. 15, line 27); passing the fibrous web layer through the nip formed by two rolls, one of them (14) having cavities that are negatives of a plurality of male fastening elements (Figure 13 and Figure 13a); introducing a molten thermoplastic (col. 2, lines 40-55) resin (20) into the cavities in excess of amount that would fill the cavities which excess forms the web layer (Figure 13a); allowing the resin to at least partially solidify and stripping of the laminate from the roll (Figure 13); stretching the precursor web laminate (Figures 1 and 2; Abstract) either monoaxially or biaxially (col. 11, line 4-col. 12, line 8) to produce a fastener for the intended application (col. 10, lines 50-67). Additionally, Buzzell et al. incorporate Kennedy et al. into their disclosure by reference at col. 15, line 5. Kennedy et al. teach a method of producing laminated hook fastener products wherein they teach that woven or knitted materials (Figure 8; col. 6, lines 38-41) or non-woven materials (Figure 5; col. 5, lines 50-64) may be employed, as desired, to create a laminated

article that is capable of engaging into hooks or that can receive other bonding agents (col. 3, lines 5-14). Further, Kennedy et al. suggest optimizing the weight and thickness of the nonwoven layer (col. 5, lines 50-64). Buzzell et al. do suggest the fibrous material employed to form the laminate (Figure 13a) functions as loops in a hook and loop fastener (col. 15, lines 23-27), but do not teach that employment of a nonwoven fibrous material that is in continuous contact with the thermoplastic web layer (i.e. a nonwoven fibrous material that is not pre-compressed) which is free of staple fibers is employed.

However, Jackson teaches a method of producing a loop fastening material which comprises an orientable backing substrate which can be made of a substantially consolidated nonwoven material (col. 5, lines 29-35; claim 3) upon which filaments are applied for forming the loops (Abstract; Figure 1; col. 3, line 32-col. 4, line 26). Jackson does not expressly recite the structure of the "substantially consolidated nonwoven material". However, each of Martin (Abstract; col. 2, lines 1-27; col. 3, line 22-col. 4, line 66; col. 6, lines 16-56), Semjonow (Abstract; col. 1, lines 5-15; Figure 5) and Steuber (Figure 1; col. 1, lines 10-20; col. 2, lines 25-42; col. 3, lines 7-47) teach methods of producing analogous and applicable consolidated nonwoven materials that are free of staple fibers. Additionally, de Navas Albareda teaches cutting a precursor fastener web in the cross-direction (Figure 1 and Figure 3).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have employed the loop fastening material disclosed by Jackson as the loop material in Buzzell et al. for the purpose of employing a relatively inexpensive loop material that could be stretched. Further, as suggested by each of Martin, Semjonow, and Steuber, one having ordinary skill would have found it obvious to have employed a nonwoven material that was free of staple fibers in the combination (i.e. as the orientable backing substrate of Jackson) since, the

examiner submits, such a structure is implied by the disclosure of Jackson and each of Martin, Semjonow, and Steuber disclose advantages associated with employment of their material that would be applicable to achieving the goals set forth by each of Buzzell et al. and Jackson (e.g. Martin: improved elasticity; Steuber: col. 3, lines 35-37).

Additionally, it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have cut the web in the cross-direction, as taught by de Navas Albareda because de Navas Albareda suggest that such cutting (and extruding of rib structures) is an equivalent and alternative means of forming fastener products.

The examiner recognizes that Buzzell et al. do not expressly recite all the claimed physical properties and effects. However, the combination employs the same claimed materials and performs the same claimed steps in the same claimed manner. As such, the examiner submits that the same claimed effects and physical properties are intrinsically achieved by the practice of the combined method (e.g. decreasing basis weight to a weight of less than 100 $g/m^2$). Further, Buzzell et al. teach the thickness of the web is reduced to a thickness as low as about 0.001 inches (col. 13, lines 26-36) (i.e. about 25 um) which is within the range set forth by the instant disclosure (US 2005/0202205; paragraphs [0062] and [0082]).

As to claim 40, the combination performs the same claimed steps in the same claimed manner on the same claimed materials. As such, the examiner submits that implicitly the same claimed effects and physical properties would be achieved by the practice of the combined method.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and any one of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of Miller et al (US 6,054,091).

As to claim 3, the combination teaches the method set forth above. Buzzell et al. do not teach modifying the shape of the male fastening elements as claimed. However, Miller et al. teach an analogous method showing such a configuration in order to produce hooks on the male elements having a J-shape (Figures 1-5).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have modified the shape of the male elements as suggested by Miller et al. since, Miller et al. suggest that such a change in the sequence of forming the hook elements is generally known in the art and since Miller et al. suggest that such a method is effective at forming J-shaped hooks when they are desired for a specific application.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and any one of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of Romanko et al. (US 6,484,371) and Conway (US 5,778,457).

As to claim 27, the combination teaches the method set forth above. Buzzell et al. do not teach cutting the precursor laminate in the cross-directions as claimed. However, Romanko

et al. teach cutting a precursor fastener web in the cross-direction (Figure 3a-3g; Figure 7 and 8; col. 8, lines 13-27) and utilizing a hook and fabric structure in sanitary napkins (col. 11, lines 44-47) and Conway disclose a configuration for employing a hook structure with backing in a sanitary napkin (Figure 4A).

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have cut the web in the cross-direction and employed them in sanitary napkin applications, for example, as taught by Romanko et al., since Romanko et al. suggest such a method is conventional for producing fasteners and that such a structure provides a less skin irritating product (col. 2, lines 4-12). Further, it would have been prima facie obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have employed the material of Buzzell in such a way that the male fastening elements would be exposed and the backing fibrous layer would not be exposed as suggested by Conway since Conway suggest that such a configuration is effective for forming a sanitary napkin. Additional motivation is provided by Kennedy et al. in that Kennedy et al. further teach that a backing material further facilitates applications requiring adhesive/glue (col. 3, lines 5-15).

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and any one of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of either of Song et al. (US 5,534,215) or Gebler et al. (US 3,324,218).

As to claim 36, the combination teaches the method set of claim 35 as set forth above. Further, while Buzzell et al. teach longitudinally stretching the web prior to stretching the web widthwise to pre-orient the film, Buzzell et al. do not teach the longitudinal pre-orientation is performed by passing the laminate over rollers of increasing speed. However, Song et al. teach a method of orienting a polyester film wherein the film is first stretched longitudinally with rolls of increasing speed and then widthwise (col. 3, lines 1-14) and Gebler et al. teach a method of orienting a polypropylene film wherein the film is first stretched longitudinally with rolls of increasing speed and then widthwise (Figures 4a-4c; col. 1, line 70-col. 2, line 9; Example).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have employed rolls of increasing speed to stretch the film longitudinally, as suggested by either of Song et al. or Gebler et al., since each of Song et al. and Gebler et al. suggest such a method is an equivalent and alternative method known in the art to stretch a film (MPEP 2144.06-2144.07). Further, Buzzell et al. suggests pre-orienting the film longitudinally strengthens the web (col. 11, lines 40-49). As such, Buzzell et al. establish pre-orientation of the film in the longitudinal direction as a result effective variable that would have been optimized prior to stretching in the transverse direction.

Claims 44, 45 and 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Shepard et al. (US 6,598,276), Romanko et al. (US 6,484,371) and Conway (US 5,778,457).

Regarding claims 44, 45 and 47-51, Buzzell et al. teach a process of producing stretched fasteners comprising providing a fibrous web layer (Figure 13 and Figure 13a) for

employment as the loop member in a hook and loop fastener (col. 14, line 60 - col. 15, line 27); passing the fibrous web layer through the nip formed by two rolls, one of them (14) having cavities that are negatives of a plurality of male fastening elements (Figure 13 and Figure 13a); introducing a molten thermoplastic (col. 2, lines 40-55) resin (20) into the cavities in excess of amount that would fill the cavities which excess forms the web layer (Figure 13a); allowing the resin to at least partially solidify and stripping of the laminate from the roll (Figure 13); stretching the precursor web laminate (Figures 1 and 2; Abstract) either monoaxially or biaxially (col. 11, line 4-col. 12, line 8) to produce a fastener for the intended application (col. 10, lines 50-67). Additionally, Buzzell et al. incorporate Kennedy et al. into their disclosure by reference at col. 15, line 5. Kennedy et al. teach a method of producing laminated hook fastener products wherein they teach that woven or knitted materials (Figure 8; col. 6, lines 38-41) or non-woven materials (Figure 5; col. 5, lines 50-64) may be employed, as desired, to create a laminated article that is capable of engaging into hooks or that can receive other bonding agents (col. 3, lines 5-14). Further, Kennedy et al. suggest optimizing the weight and thickness of the nonwoven layer (col. 5, lines 50-64). Buzzell et al. do suggest the fibrous material employed to form the laminate (Figure 13a) functions as loops in a hook and loop fastener (col. 15, lines 23-27), but do not teach that employment of a nonwoven fibrous material that is in continuous contact with the thermoplastic web layer (i.e. a nonwoven fibrous material that is not pre-compressed) is employed. However, Shepard et al., who also incorporate Kennedy et al. (a patent related to the Kennedy et al. patent incorporated by Buzzell) into their disclosure by reference (col. 4, lines 30-39), teach a method of providing a nonwoven, uncompressed fastener loop material that is less expensive than conventional loop fabrics (col. 1, lines 21-34) that has a binder applied to its backside and is then stretched, after the application of the binder (which can take a variety of forms – see claims 14-24 and 30), to form a stabilized loop product

(col. 1, line 54-col. 2, line 12; col. 4, lines 30-39; col. 5, lines 9-26; col. 9, lines 62-col. 10, line 13; col. 11, line 55-col. 12, line 5; col. 13, lines 21-23; col. 15, lines 39-44 col. 17, lines 50-64; claims 14-24 and 30).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have employed a nonwoven, uncompressed, stretchable, fibrous loop material, as the fabric layer of Buzzell et al., as suggested by Shepard et al., for the purpose, as suggested by Shepard et al. of providing stretchable loop material that is less expensive than conventional loop fabrics. The examiner submits that in the combination with Buzzell et al., the uncompressed, nonwoven loop material fed between the rolls (14) and (16) is in continuous contact with the layer of thermoplastic resin (e.g. compare Figure 13 of Buzzell et al. with Figures 1a and 2 of the original disclosure).

The examiner recognizes that Buzzell et al. do not expressly recite all the claimed physical properties and effects. However, the combination employs the same claimed materials and performs the same claimed steps in the same claimed manner. As such, the examiner submits that the same claimed effects and physical properties are intrinsically achieved by the practice of the combined method (e.g. decreasing basis weight to a weight of less than 100 $g/m^2$). For example, the examiner notes that the nonwoven material of Shepard has a basis weight of about 2 ounces/sq. yard (about 67 $g/m^2$) or less (col. 1, lines 29-39; col. 7, lines 17-19) and that Shepard identifies stretching as a result effective variable that is selected to reduce the weight of the final product (col. 16, lines 15-27) and the cost of the final product (col. 1, lines 21-34; col. 7, lines 31-34). Additionally, Buzzell et al. teach the thickness of the web is reduced to a thickness as low as about 0.001 inches (col. 13, lines 26-36) (i.e. about 25 um) which is within the range set forth by the instant disclosure (US 2005/0202205; paragraphs [0062] and [0082]).

Buzzell et al. do not teach cutting the precursor laminate in the cross-directions as claimed. However, Romanko et al. teach cutting a precursor fastener web in the cross-direction (Figure 3a-3g; Figure 7 and 8; col. 8, lines 13-27) and utilizing a hook and fabric structure in sanitary napkins (col. 11, lines 44-47) and Conway disclose a configuration for employing a hook structure with backing in a sanitary napkin (Figure 4A).

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have cut the web in the cross-direction and employed them in sanitary napkin applications, for example, as taught by Romanko et al., since Romanko et al. suggest such a method is conventional for producing fasteners and that such a structure provides a less skin irritating product (col. 2, lines 4-12). Further, it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have employed the material of Buzzell in such a way that the male fastening elements would be exposed and the backing fibrous layer would not be exposed as suggested by Conway since Conway suggest that such a configuration is effective for forming a sanitary napkin. Additional motivation is provided by Kennedy et al. in that Kennedy et al. further teach that a backing material further facilitates applications requiring adhesive/glue (col. 3, lines 5-15).

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Shepard et al. (US 6,598,276), Romanko et al. (US 6,484,371) and Conway (US 5,778,457), as applied to claims 44, 45 and 47-51 above, and further in view of Miller et al. (US 6,054,091).

As to claim 46, the combination teaches the method set forth above. Buzzell et al. do not teach modifying the shape of the male fastening elements as claimed. However, Miller et al. teach an analogous method showing such a configuration in order to produce hooks on the male elements having a J-shape (Figures 1-5).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have modified the shape of the male elements as suggested by Miller et al. since, Miller et al. suggest that such a change in the sequence of forming the hook elements is generally known in the art and since Miller et al. suggest that such a method is effective at forming J-shaped hooks when they are desired for a specific application.

Claims 44, 45 and 47-51 rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593), Romanko et al. (US 6,484,371), and Conway (US 5,778,457) and any one of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899).

Regarding claims 44, 45 and 47-51, Buzzell et al. teach a process of producing stretched fasteners comprising providing a fibrous web layer (Figure 13 and Figure 13a) for employment as the loop member in a hook and loop fastener (col. 14, line 60 - col. 15, line 27); passing the fibrous web layer through the nip formed by two rolls, one of them (14) having cavities that are negatives of a plurality of male fastening elements (Figure 13 and Figure 13a); introducing a molten thermoplastic (col. 2, lines 40-55) resin (20) into the cavities in excess of amount that would fill the cavities which excess forms the web layer (Figure 13a); allowing the resin to at least partially solidify and stripping of the laminate from the roll (Figure 13); stretching

the precursor web laminate (Figures 1 and 2; Abstract) either monoaxially or biaxially (col. 11, line 4-col. 12, line 8) to produce a fastener for the intended application (col. 10, lines 50-67). Additionally, Buzzell et al. incorporate Kennedy et al. into their disclosure by reference at col. 15, line 5. Kennedy et al. teach a method of producing laminated hook fastener products wherein they teach that woven or knitted materials (Figure 8; col. 6, lines 38-41) or non-woven materials (Figure 5; col. 5, lines 50-64) may be employed, as desired, to create a laminated article that is capable of engaging into hooks or that can receive other bonding agents (col. 3, lines 5-14). Further, Kennedy et al. suggest optimizing the weight and thickness of the nonwoven layer (col. 5, lines 50-64). Buzzell et al. do suggest the fibrous material employed to form the laminate (Figure 13a) functions as loops in a hook and loop fastener (col. 15, lines 23-27), but do not teach that employment of a nonwoven fibrous material that is in continuous contact with the thermoplastic web layer (i.e. a nonwoven fibrous material that is not pre-compressed) which is free of staple fibers is employed.

However, Jackson teaches a method of producing a loop fastening material which comprises an orientable backing substrate which can be made of a substantially consolidated nonwoven material (col. 5, lines 29-35; claim 3) upon which filaments are applied for forming the loops (Abstract; Figure 1; col. 3, line 32-col. 4, line 26). Jackson does not expressly recite the structure of the "substantially consolidated nonwoven material". However, each of Martin (Abstract; col. 2, lines 1-27; col. 3, line 22-col. 4, line 66; col. 6, lines 16-56), Semjonow (Abstract; col. 1, lines 5-15; Figure 5) and Steuber (Figure 1; col. 1, lines 10-20; col. 2, lines 25-42; col. 3, lines 7-47) teach methods of producing analogous and applicable consolidated nonwoven materials that are free of staple fibers.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have

employed the loop fastening material disclosed by Jackson as the loop material in Buzzell et al. for the purpose of employing a relatively inexpensive loop material that could be stretched. Further, as suggested by each of Martin, Semjonow, and Steuber, one having ordinary skill would have found it obvious to have employed a nonwoven material that was free of staple fibers in the combination (i.e. as the orientable backing substrate of Jackson) since, the examiner submits, such a structure is implied by the disclosure of Jackson and each of Martin, Semjonow, and Steuber disclose advantages associated with employment of their material that would be applicable to achieving the goals set forth by each of Buzzell et al. and Jackson (e.g. Martin: improved elasticity; Steuber: col. 3, lines 35-37).

The examiner recognizes that Buzzell et al. do not expressly recite all the claimed physical properties and effects. However, the combination employs the same claimed materials and performs the same claimed steps in the same claimed manner. As such, the examiner submits that the same claimed effects and physical properties are intrinsically achieved by the practice of the combined method (e.g. decreasing basis weight to a weight of less than 100 $g/m^2$). For example, Buzzell et al. teach the thickness of the web is reduced to a thickness as low as about 0.001 inches (col. 13, lines 26-36) (i.e. about 25 um) which is within the range set forth by the instant disclosure (US 2005/0202205; paragraphs [0062] and [0082]).

Buzzell et al. do not teach cutting the precursor laminate in the cross-directions as claimed. However, Romanko et al. teach cutting a precursor fastener web in the cross-direction (Figure 3a-3g; Figure 7 and 8; col. 8, lines 13-27) and utilizing a hook and fabric structure in sanitary napkins (col. 11, lines 44-47) and Conway disclose a configuration for employing a hook structure with backing in a sanitary napkin (Figure 4A).

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have cut

the web in the cross-direction and employed them in sanitary napkin applications, for example, as taught by Romanko et al., since Romanko et al. suggest such a method is conventional for producing fasteners and that such a structure provides a less skin irritating product (col. 2, lines 4-12). Further, it would have been prima facie obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have employed the material of Buzzell in such a way that the male fastening elements would be exposed and the backing fibrous layer would not be exposed as suggested by Conway since Conway suggest that such a configuration is effective for forming a sanitary napkin. Additional motivation is provided by Kennedy et al. in that Kennedy et al. further teach that a backing material further facilitates applications requiring adhesive/glue (col. 3, lines 5-15).

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593), Romanko et al. (US 6,484,371) and Conway (US 5,778,457) and any one of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 44, 45 and 47-51 above, and further in view of Miller et al. (US 6,054,091).

As to claim 46, the combination teaches the method set forth above. Buzzell et al. do not teach modifying the shape of the male fastening elements as claimed. However, Miller et al. teach an analogous method showing such a configuration in order to produce hooks on the male elements having a J-shape (Figures 1-5).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Buzzell et al. and to have modified the shape of the male elements as suggested by Miller et al. since, Miller et al. suggest

that such a change in the sequence of forming the hook elements is generally known in the art and since Miller et al. suggest that such a method is effective at forming J-shaped hooks when they are desired for a specific application.

### *Response to Arguments*

Applicant's arguments filed November 16, 2009 have been fully considered, but they are essentially moot in view of the new grounds of rejection necessitated by the amendment. However, it is noted that as set forth in the body of the rejection above, the examiner does not agree that employing the fastener of Buzzell et al. in the disposable article as claimed in amended claim 27 and new claim 44 would render it unsatisfactory for its intended purpose, but that such a use would be an art recognized equivalent and/or alternative application for such a fastener structure.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY WOLLSCHLAGER whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Wollschlager/
Primary Examiner
Art Unit 1791

February 23, 2010